

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
3 February 2005 (03.02.2005)

PCT

(10) International Publication Number  
**WO 2005/011024 A2**

(51) International Patent Classification<sup>7</sup>: **H01M 2/36**,  
2/04, 10/42

(21) International Application Number:  
PCT/IT2004/000398

(22) International Filing Date: 22 July 2004 (22.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
VI2003A000148 24 July 2003 (24.07.2003) IT

(71) Applicant and

(72) Inventor: **STOCCHIERO, Franco** [IT/IT]; Via G.  
Zanella 34/A, I-36050 Montorso Vicentino (IT).

(74) Agent: **ZILIOTTO, Tiziano**; Contrada Porta S. Lucia, 48,  
I-36100 Vicenza (IT).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

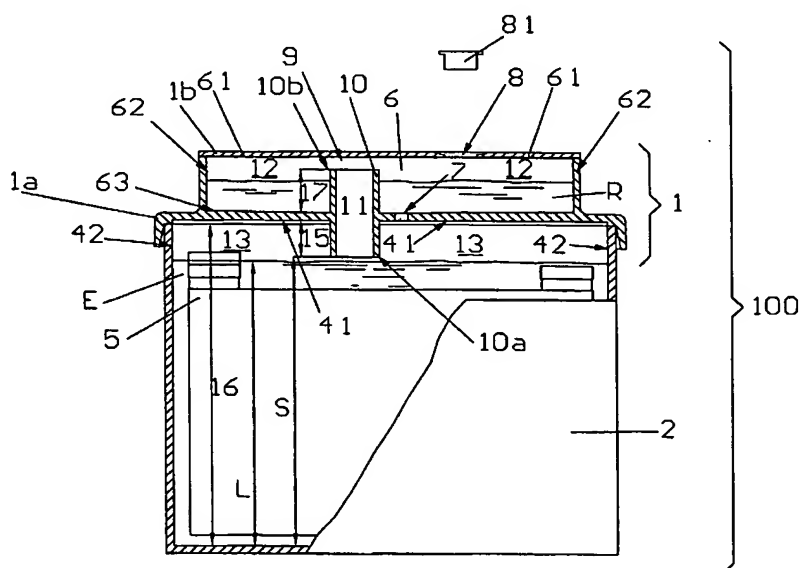
(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished  
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: COVER FOR ELECTRIC ACCUMULATOR AND RELATIVE ELECTRIC ACCUMULATOR



(57) Abstract: The invention concerns a cover (1, 101, 102, 103, 104, 105) for an electric accumulator (100) adapted to be integral with the container (2) of the accumulator (100) and a relative accumulator (100). The cover (1, 101, 102, 103, 104, 105) comprises: a reservoir (6), adapted to contain a topping up liquid (R) of the electrolyte (E) present in the cells (4) of the accumulator (100), communicating through a supply duct (7) with the cells (4); control means (9) of the level (L) of the electrolyte (E) in the cells (4) adapted to prevent/allow the flow of topping up liquid (R) when the corresponding level (L) of the electrolyte (E) is higher/lower than a predetermined level (S).

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
3 February 2005 (03.02.2005)

PCT

(10) International Publication Number  
**WO 2005/011024 A3**

(51) International Patent Classification<sup>7</sup>: **H01M 2/36, 2/04**

(21) International Application Number:  
PCT/IT2004/000398

(22) International Filing Date: 22 July 2004 (22.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
VI2003A000148 24 July 2003 (24.07.2003) IT

(71) Applicant and

(72) Inventor: **STOCCHIERO, Franco** [IT/TT]; Via G.  
Zanella 34/A, I-36050 Montorso Vicentino (IT).

(74) Agent: **ZILIOTTO, Tiziano**; Contrada Porta S. Lucia, 48,  
I-36100 Vicenza (IT).

(81) Designated States (*unless otherwise indicated, for every  
kind of national protection available*): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,

KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (*unless otherwise indicated, for every  
kind of regional protection available*): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

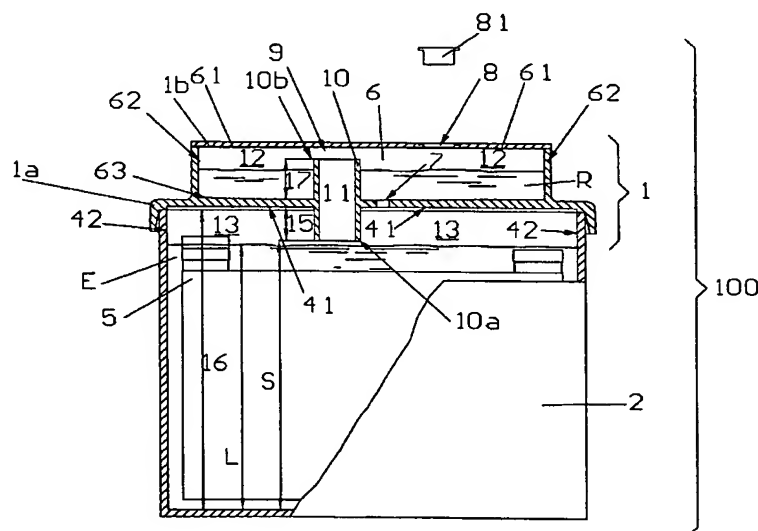
**Published:**

- with international search report
- before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

(88) Date of publication of the international search report:  
16 June 2005

*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: COVER FOR ELECTRIC ACCUMULATOR AND RELATIVE ELECTRIC ACCUMULATOR



(57) Abstract: The invention concerns a cover (1, 101, 102, 103, 104, 105) for an electric accumulator (100) adapted to be integral with the container (2) of the accumulator (100) and a relative accumulator (100). The cover (1, 101, 102, 103, 104, 105) comprises: a reservoir (6), adapted to contain a topping up liquid (R) of the electrolyte (E) present in the cells (4) of the accumulator (100), communicating through a supply duct (7) with the cells (4); control means (9) of the level (L) of the electrolyte (E) in the cells (4) adapted to prevent/allow the flow of topping up liquid (R) when the corresponding level (L) of the electrolyte (E) is higher/lower than a predetermined level (S).